

# THE ROLE OF DOCTORAL STUDENTS' MOTIVATION AND ANXIETY IN THEIR ENGLISH ACADEMIC WRITING

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## Abstract

Publishing academic papers in English is a must for all doctoral students in programs conducted in English. Graduate students must be able to use specific language features, discourse practices, communicative skills of target academic groups, as well as their subject-matter expertise. Therefore, doctoral students of non-English-speaking backgrounds may struggle to acquire the ability to construct knowledge in disciplinary-oriented ways at an internationally accepted level and to complete their dissertation within a contract period. Consequently, it is important for them to sustain their motivation to be able to achieve their objectives in a timely fashion. The current study is part of a larger research project using a 1 to 6 Likert scale questionnaire and it aims to investigate students' self-perceived autonomy for the quality of their English academic writing, their self-perceived impacts of different types of feedback on their motivation, their satisfaction regarding the progress they make in English academic writing and their self-perception in terms of their ability to maintain their motivation throughout the journey of writing their dissertation. A survey was conducted in the spring of 2022 involving 255 (125 females; 127 males; 3 not stated) doctoral students, all non-native users of English, at 14 Hungarian universities. Data analyses showed that the doctoral students tended to maintain their motivation as they enjoyed a high level of learner autonomy, they had a good understanding of feedback and demonstrated a high level of satisfaction with their progress in English academic writing performance. Besides, they believed that they could handle stress and anxiety successfully. Therefore, we concluded that their motivation helped them improve their academic writing and as they gained mastery, their motivation was maintained.

Keywords: doctoral students, completing dissertations, motivation, anxiety, academic writing, self-assessments.

## 1 INTRODUCTION

A range of publications on various scientific topics pointed out that many graduate students were not equipped with adequate academic writing skills for writing research papers and dissertations [1-2]. Non-native students (NNS) get admission to PhD programs if they meet the required English proficiency scores on standardized proficiency tests. However, test scores do not guarantee that the students have adequate academic writing competence as typically students from English as a lingua franca (ELF) context have not had any formal instruction in academic writing before they enter their degree program [3]. An additional problem concerns the fact that admitted students are not offered or required developmental courses targeting their English academic writing abilities [4]. The demand to meet the rigours of discipline-based writing is a struggle for many NNS [5]. Consequently, extensive writing requirements of academic texts created a burden for students [6]. Students may suffer not only from English language barriers but also from the academic standards they are expected to meet [7]. In sum, challenges concern not only appropriate proficiency in English for academic purposes, including vocabulary, grammar, cohesion and coherence, and other language-related features, but also content- and form-related expectations concerning, for example, referencing, paraphrasing, summarizing, authenticity, and formatting academic texts as specific genres. As a result, students may face hurdles trying to meet acceptable standards of academic texts including research proposals, journal articles, and dissertations.

Students' success tends to be impacted not only by their academic abilities but also by their motivation and anxiety. Motivation is defined as the "process whereby goal-directed activities are instigated and sustained"; it plays a decisive role in academic performance as it is a drive that influences how we learn [8]. The progress of students' academic achievement is directly proportional to their motivation [9]. The feeling of having accomplished challenging tasks and having control over making progress in their own learning can make students feel motivated and encourage them to move forward confidently [10]. Even though motivation is a key driving force in academic advancement [11], its nature is dynamic, as it

fluctuates nonlinearly over time [12]. Motivation can be negatively affected by anxiety and stress [13]. In the context of doctoral education, students work under pressure to submit their publications and dissertations on time. Research showed that doctoral students can complete their tasks successfully when they feel that they get support, they make progress, and they have control over the quality of their performance [14]. It is against these backdrops that this study set out to examine the interactions between graduate students' perceived English academic writing abilities, motivation, and anxiety.

## 2 METHODOLOGY

### 2.1 Research Questions

The aim of the quantitative large-scale survey was to find answers to six research questions:

- 1 What do participants think about their autonomy concerning the quality of the texts they write in English?
- 2 What are their views on the ways in which the feedback they received impacted their motivation?
- 3 How do doctoral students perceive their own development in English academic writing?
- 4 How do they self-assess their ability to maintain their motivation during their studies?
- 5 How do they perceive their ability to manage stress and anxiety related to academic writing in English?
- 6 How do they assess their ability to overcome the challenges they face in English academic writing?
- 7 What is the role of gender in the students' self-assessments?

### 2.2 Participants

A total of 255 international and Hungarian doctoral students (125 female; 127 males; 3 not stated) participated in the study. The students were studying at 14 universities of Hungary. They came from 49 different countries; they represented 52 different mother tongues. They studied in 68 PhD programs (1<sup>st</sup>-year=36.5%; 2<sup>nd</sup>-year=25.1%; 3<sup>rd</sup>- year=18%; 4<sup>th</sup>-year=16.9%; 4+ year=2%; not mentioned=1.6%). Age ranges were 23-25 (4.7%), 26-30 (33.7%), 31-35 (36.9%), 36-40 (12.9%), 41-45 (9%), 46-50 (1.6%), 51-55 (0.8%), not mentioned (0.2%).

### 2.3 Data Collection Instrument

A survey link was created using Google form and the link was sent to the PhD students in Hungary between 2/21/2022 and 4/2/2022. The question items were presented on a 1 to 6 Likert scale (1=Strongly Disagree, 2=Disagree, 3=Slightly Disagree, 4=Slightly Agree, 5=Agree, 6. Strongly Agree). The questions focused on their self-perceived autonomy in the quality of academic writing performance in English (1 item), their perceived impact of different types of feedback they received on their motivation (2 items). students' self-perceived ability in English academic writing (1item) and their self-perceived ability in maintaining their motivation (2 items).

## 3 RESULTS OF DATA ANALYSIS

According to the results of descriptive statistical analysis, the participants agreed to a great extent with the items tapping their self-assessments, except the item about feedback on their weaknesses (*I feel discouraged when I get feedback on my weaknesses*) (see Table 1).

Table 1. Descriptive statistics of students' self-assessments (N=255)

<i>Self-assessments</i>	<i>M</i>	<i>SD</i>
It is up to me how well I can write in English.	4.89	1.02
Feedback on my strengths motivates me to work harder.	5.15	0.87
I feel discouraged when I get feedback on my weaknesses.	3.28	1.43
I feel that my academic English writing abilities have improved.	4.98	0.97
I've managed to maintain my motivation to complete my doctoral work.	4.73	1.28
I could handle my stress and anxiety successfully.	4.49	1.29
I managed to overcome the challenges I faced in English academic writing.	4.83	1.00

### 3.1 RQ1. Doctoral students' perception of their autonomy concerning the quality of the texts they write in English

The students believed that they were autonomous (*It is up to me how well I can write in English.*) (M=4.88, SD=1.03).

### 3.2 RQ2. Students' perceived impact of the feedback they receive on their motivation

The participants strongly agreed that feedback on their strengths motivates them to work harder (M=5.15, SD= 0.87). However, students agreed to a lesser degree with the statement that they felt discouraged when feedback focused on their weaknesses (M=3.28, SD=1.44).

### 3.3 RQ3. Participants' perception of their own development in English academic writing

The respondents were positive about the progress they experienced in their academic writing abilities (I feel that my academic English writing abilities have improved. (M=4.98, SD=.97).

### 3.4 RQ4. Doctoral students' perception of their ability to maintain motivation during their studies

The students tended to believe that they had managed to maintain their motivation to complete their doctoral work (M=4.70, SD=1.29).

### 3.5 RQ5. Students' perception of their ability to manage stress and anxiety related to academic writing in English

The students believed that they could handle their stress and anxiety successfully (M=4.90, SD=.98).

### 3.6 RQ6. Students' perception of their ability to overcome the challenges they face in English academic writing

The participants tended to agree with the statement that they managed to overcome the challenges they faced in English academic writing (M=4.83, SD=1.01).

### 3.7 RQ7. The role of gender in students' self-assessments

To examine if there is a difference between female and male students' responses, the data set was thoroughly examined again for all the items. As results in Table 2 show, we found that male students tended to score higher than their female peers, except for items no. (2) and no. (3).

Table 2. Descriptive statistics of female and male students

<i>Self-assessments</i>	<i>Gender</i>	<i>M</i>	<i>SD</i>
1. It is up to me how well I can write in English.	Female	4.75	1.15
	Male	5.02	0.88
2. Feedback on my strengths motivates me to work harder.	Female	5.25	0.76
	Male	5.05	0.94
3. I feel discouraged when I get feedback on my weaknesses.	Female	3.50	1.41
	Male	3.06	1.44
4. I feel that my academic English writing abilities have improved.	Female	4.81	1.08
	Male	5.15	0.81
5. I've managed to maintain my motivation to complete my doctoral work.	Female	4.42	1.46
	Male	5.02	1.01
6. I could handle my stress and anxiety successfully.	Female	4.06	1.45
	Male	4.90	0.97
7. I managed to overcome the challenges I faced in English academic writing.	Female	4.74	1.07
	Male	4.92	0.94

Note. Female=125, Male=127

To investigate if the differences were significant, an independent samples t-test was conducted. As shown in Table 3, the differences were statistically significant ( $p < .05$ ), except for item no. (2) and no. (7).

Table 3. An independent samples t test: Self-assessment scores of men and women

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
1. It is up to me how well I can write in English.	Equal variances assumed	6.787	0.010	-2.113	250	0.036	-0.27162	0.12855	-0.52479	-0.01845
	Equal variances not assumed			-2.109	232.074	0.036	-0.27162	0.12882	-0.52542	-0.01782
2. Feedback on my strengths motivates me to work harder.	Equal variances assumed	0.480	0.489	1.862	250	0.064	0.20076	0.10780	-0.01156	0.41307
	Equal variances not assumed			1.865	240.610	0.063	0.20076	0.10762	-0.01124	0.41275
3. I feel discouraged when I get feedback on my weaknesses.	Equal variances assumed	0.153	0.696	2.419	250	0.016	0.43301	0.17902	0.08042	0.78559
	Equal variances not assumed			2.419	249.995	0.016	0.43301	0.17899	0.08048	0.78554
4. I feel that my academic English writing abilities have improved.	Equal variances assumed	5.708	0.018	-2.842	250	0.005	-0.34161	0.12020	-0.57834	-0.10487
	Equal variances not assumed			-2.835	229.289	0.005	-0.34161	0.12048	-0.57899	-0.10423
5. I've managed to maintain my motivation to complete my doctoral work.	Equal variances assumed	21.836	0.000	-3.794	250	0.000	-0.59962	0.15806	-0.91092	-0.28832
	Equal variances not assumed			-3.783	220.380	0.000	-0.59962	0.15850	-0.91200	-0.28725
6. I could handle my stress and anxiety successfully.	Equal variances assumed	18.538	0.000	-5.359	250	0.000	-0.83364	0.15557	-1.14003	-0.52724
	Equal variances not assumed			-5.342	216.445	0.000	-0.83364	0.15604	-1.14119	-0.52608
7. I managed to overcome the challenges I faced in English academic writing.	Equal variances assumed	2.659	0.104	-1.398	250	0.163	-0.17726	0.12675	-0.42690	0.07238
	Equal variances not assumed			-1.397	244.880	0.164	-0.17726	0.12688	-0.42718	0.07266

We can conclude that men were significantly more confident about their abilities to write good quality texts, make progress, maintain their motivation, manage stress, and overcome the challenges they face throughout their doctoral journey. As for the impact of feedback, female students scored higher than male students, indicating that women tended to be more anxious and less confident. Women agreed more with the statement that they felt motivated when feedback focused on their strengths and agreed to a higher degree with the statement that they felt discouraged when feedback concerned their weaknesses.

#### 4 DISCUSSION AND CONCLUSION

For human beings, there are three basic needs to be met to stay motivated and mentally healthy. Autonomy is at the core of the motivational system as it is essential for them to feel that they have full control over the pace of progress they are making. Otherwise, it will make them depressed and unmotivated when they feel their progress is controlled by others and not in their hands [15-16]. In doctoral education contexts, the sense of ownership over learning makes students feel intrinsically motivated. Findings of previous research highlighted that doctoral students make more academic

progress when they feel a sense of control over the quality of their coursework and their dissertation work [17]. Therefore, the results of the current study show positive outcomes regarding the way autonomy interacts with motivation in pursuit of their academic English writing goals.

A sense of belonging also helps people stay motivated and focused; they all want to believe that they are a part of the society they live in. It is natural that they are willing to make more efforts for the development of themselves and of their community when they have meaningful and mutual connections with other members of their society [18]. Previous research indicated that doctoral students' academic achievements were more significant when they feel that their advisers and faculty members care about their success [19]. According to the findings of the current research, the doctoral students from 14 universities of Hungary in this study interpreted the feedback they received in positive ways even when the feedback focused on their weaknesses, indicating that they understand their advisors and professors had to point out both their weaknesses and strengths. As they understand the good intention of the feedback they received, they felt motivated when feedback was on their strength, and they did not feel much depressed even when it focused on their weaknesses.

Moreover, it is equally important for people to believe that they are making progress in what they are pursuing. Sense of competency refers to the feeling of having "an effect on the environment as well as to attain valued outcomes within it" [20]. In this study, the students self-assessed their competency in making progress of academic writing ability, maintaining motivation and handling negative affective factors while writing academic texts, and managing to overcome the obstacles as high (Mean range between 4.49 and 4.98, SD range between 0.97 and 1.29), indicating that they felt a sense of mastery. Research has shown that doctoral students' self-perceived competence is one of the key factors that help them stay motivated in order to carry out doctoral tasks in a timely manner, "one's confidence in successfully performing tasks associated with conducting research" [21]. Findings of previous research consistently indicated that doctoral students' self-efficacy was significantly related to their ability to produce quality publications [22-25].

We found that participants' self-perceptions about their English academic writing abilities and motivation are interdependent, as they tend to go hand in hand in the dataset. One noticeable finding is that male students were more confident when assessing their abilities, compared to their female peers. Women seemed to be more impacted and emotional about the feedback they received, perhaps due to their lower level of self-confidence about their own abilities. The role and the impact of feedback seemed to play a more important role in female respondents' lives.

## 5 LIMITATION OF THE STUDY

As the findings of the current study are based on the results of seven self-assessed statements of 255 doctoral students in Hungary, they cannot be generalized to the whole doctoral student population even in Hungary. Besides, all the participants in this study were from non-English-speaking backgrounds. Therefore, the way these students assessed themselves on the factors related to English academic writing performance may be different from students in other contexts.

## 6 FUTURE STEPS

Currently, we are designing semi-structured interview questions based on the findings of the quantitative study. In the next phase, we will interview a subsample of students who provided their email addresses. We aim to find out individual practices of maintaining motivation and coping with stress and anxiety along their English academic writing journey.

## REFERENCES

- [1] Aitchison C, Catterall J, Ross P, Burgin S. "Tough love and tears: Learning doctoral writing in the sciences," *Higher Education Research & Development*, vol.4, no. 31, pp. 435-447, 2012.
- [2] Alter C, Adkins C. "Assessing student writing proficiency in graduate schools of social work," *Journal of Social Work Education*, vol.2, no. 42, pp. 337-354, 2006.
- [3] Hyland K. "Sympathy for the devil? A defense of EAP," *Language Teaching*, vol. 3, no.51, pp.383-399, 2018.

- [4] Odena O, Burgess H. "How doctoral students and graduates describe facilitating experiences and strategies for their thesis writing learning process: A qualitative approach," *Studies in higher education*, vol.3, no.42, pp.572-590, 2017.
- [5] Bronson MC. *Writing passage: academic literacy socialization among ESL graduate students, a multiple case study*. University of California, Davis, 2004.
- [6] Leki I, Cumming A, Silva T. *A synthesis of research on second language writing in English*. Routledge, 2010.
- [7] Brown CA, Dickson R, Humphreys AL, McQuillan V, Smears E. "Promoting academic writing/referencing skills: Outcome of an undergraduate e-learning pilot project," *British journal of educational technology*, vol. 1, no.39, pp. 140- 156, 2008.
- [8] Schunk DH, Meece JR, Pintrich PR. *Motivation in education: Theory, research, and applications*. Pearson Higher Ed, 2012.
- [9] Dörnyei Z, Ryan S. *The psychology of the language learner revisited*. Routledge, 2015.
- [10] Deci EL, Ryan RM. *Intrinsic motivation and self-determination in human behavior*. New York Plenum Press, 1985.
- [11] Gardner RC. *Social psychology and second language learning: the role of attitudes and motivation*. Edward Arnold Publishers, 1985.
- [12] Dörnyei Z, Ryan S. *The psychology of the language learner revisited*. Routledge, 2015.
- [13] Dörnyei Z, Ryan S. *The psychology of the language learner revisited*. Routledge, 2015.
- [14] Litalien D, Guay F. "Dropout intentions in PhD studies: A comprehensive model based on interpersonal relationships and motivational resources," *Contemporary Educational Psychology*, vol. 41, pp. 218-231, 2015.
- [15] Deci EL, Ryan RM. *Intrinsic motivation and self-determination in human behavior*. New York Plenum Press, 1985.
- [16] Deci EL, Ryan RM. "Motivation, personality, and development within embedded social contexts: An overview of self-determination theory," in *The Oxford Handbook of Human Motivation* (R. M. Ryan, ed), pp. 85-107. New York: Oxford University Press, 2012.
- [17] Devos C, Van der Linden N, Boudrenghien G, Azzi A, Frenay M, Galand B, Klein O. "Doctoral supervision in the light of the three types of support promoted in self-determination theory," *International Journal of Doctoral Studies*, vol.10, pp. 438-446, 2015.
- [18] Deci EL, Ryan RM. *Intrinsic motivation and self-determination in human behavior*. New York Plenum Press, 1985.
- [19] Deci EL, Ryan RM. "Motivation, personality, and development within embedded social contexts: An overview of self-determination theory," in *The Oxford Handbook of Human Motivation* (R. M. Ryan, ed), pp. 85-107. New York: Oxford University Press, 2012.
- [20] Lynch MF, Salikhova NR, Salikhova "A. Internal motivation among doctoral students: Contributions from the student and from the student's environment," *International Journal of Doctoral Studies*, vol. 13, pp. 255-272, 2018.
- [21] Deci EL, Ryan RM. "The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior," *Psychological inquiry*, vol.11, no. 4, pp. 227-268, 2000.
- [22] Forester M, Kahn JH, Hesson-McInnis MS. "Factor structures of three measures of research self-efficacy," *Journal of Career Assessment*, vol. 12, no.1, pp. 3-16, 2004.
- [23] Lambie GW, Vaccaro N. "Doctoral counselor education students' levels of research self-efficacy, perceptions of the research training environment, and interest in research," *Counselor Education and Supervision*, vol.50, no.4, pp. 243-258, 2011.
- [24] Pyhältö K, Keskinen J. "Exploring the fit between doctoral students' and supervisors' perceptions of resources and challenges vis-à-vis the doctoral journey," *International Journal of doctoral studies*, vol. 7, pp.395 – 414, 2012.

- [25] Sverdlik A, Hall NC. "Not just a phase: Exploring the role of program stage on well-being and motivation in doctoral students," *Journal of Adult and Continuing Education*, vol.1, no.26, pp.97-124, 2020.